

ZYLKA, Romuald

The 6th Congress of the International Quaternary Association (INQUA)
Przegl geolog 10 no. 2:84-87 F '62.

1. Instytut Geologiczny, Warszawa.

ZYLKA, Romuald

Naphtha and gas deposits in Canada. Przegl. geol. 9 no.8:437-440 Ag '61.

1. Instytut Geologiczny, Warszawa, ul. Rakowiecka 4.

KIJESKI, Waclaw, mgr inz.; NACZYNKI, Jarzy, inz.; ZYLKO, Waclaw, mgr.

Problems and state of gas engineering in the German Democratic Republic as seen from certain centers. Gaz woda techn sanit 37 no.4/5:133-136 Ap-Mu '63.

1. Central Gas Engineering Laboratory, Warsaw.

ZYLKOWSKI, Tadeusz

Some aspects of the shipping activities on the Poland-Iceland route.
Tech gosp morska 11 no.1:7-9 Ja '61.

1. Polska Zegluga Morska, Szczecin.

URBANSKI, Tadeusz; SKOWRONSKA-SERAFINOWA, Barbara; ZYLOWSKI, Jerzy

Reactions of aromatic amines with cyanoguanidine. IX. Naphthalimidine-urea and its reactions with amines. Rocznik chemii 33 no.6:1377-1382 '59.
(EEAI 9:9)

1. Katedra Technologii Organicznej II Politechniki, Warszawa i
Zaklad Syntezy Lekow Instytutu Gruzdlicy, Warszawa.

(Cyanoguanidine) (Amines)
(Naphthalimidourea) (Aromatic compounds)

ZYLAWSKI, Jerzy, mgr inz.

Exporting Polish-made factories. Horyz techn 18 no.1:6-8 '65.

Z/032/60/010/08/006/033
E073/E535

AUTHOR: Zymák, V., Engineer

TITLE: Volumetric Efficiency of Radial Piston Pumps³

PERIODICAL: Strojírenství, 1960, Vol 10, No 8, pp 577-583

ABSTRACT: A new method is proposed for calculating the volumetric efficiency of radial piston pumps which takes into consideration the eccentricity of the pistons in their cylinders as well as the eccentricity of the rotor on its spindle. The volumetric efficiency is expressed by an equation which contains terms for taking into consideration leakage and suction losses. The influence of the pressure and temperature on the deformation of the individual parts of the pump are also taken into consideration. The author derives formulae for determining the optimum pressure gradient, the one for which the temperature rise will be lowest. The use of the derived relations is illustrated on a practical example of calculating the volumetric losses in a radial pump with five 18 mm dia. pistons, 1500 r.p.m. with a throughput of 14.5 litres/min at a pressure of 250 atm., the peak pressure being up to 350 atm.; this

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Z/032/60/010/08/006/033
E073/E535

Volumetric Efficiency of Radial Piston Pumps

high pressure rotary pump has been designed and is being manufactured by the Lenin (Skoda) Works, Pilsen. In the conclusions it is stated that the suction losses cannot be expressed for the time being by a satisfactory mathematical formula and their magnitude can only be determined by practical tests. Reduction of these losses can be obtained by a suitable choice of the running speed, increase of the size of the suction canals and mainly by filling the spaces of the piston pump with the liquid to be transported by means of a low pressure auxiliary pump. The leakage losses can be reduced by reducing the tolerances to the minimum possible; in calculating these losses it is essential to take into consideration the eccentricity of the sealing components, the changes in the viscosity of the liquid and the changes in the play as a function of the pressure and temperature. In medium pressure, and particularly in high pressure, pumps the increase in the sealing gaps as a result of the high

Card 2/3 pressure of the liquid has the greatest influence on the

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Z/032/60/010/08/006/033
E073/E535

Volumetric Efficiency of Radial Piston Pumps

leakage losses and, therefore, the respective components of the pump and also of the motor should have a high rigidity. Calculation of volumetric losses of pumps and hydraulic motors carried out on the assumption of a constant viscosity of the fluid and of zero eccentricity is incorrect even for low operating pressures and does not even provide an approximately accurate picture on the conditions pertaining in reality.

There are 8 figures and 6 references, 5 of which are Czech and 1 Soviet.

ASSOCIATION: Závody V. I. Lenina, Plzeň (V. I. Lenin Works,
Pilsen)

Card 3/3

ZYL'YEV, L. M., BARDIN, I. P., OSTROUKHOV, M. Y. and KHODAK, L. S.

"Neue Auffassungen über den Verbrennungsprozess des Kokes an den Windformen des Hochofens," Neue Hütte, No.4, 1956

Metallurgical Inst., AS USSR

ZYMA, Besim, docent dr.

Hazards of laryngeal stenosis. Shendet. pop. 23 no. 5:16-20 '62.
(LARYNX)

ZYMA, Besim, doc. dr.

The hazard of toxic effects of streptomycin on the auditory system. Shendet pop. 6 '62.
(STREPTOMYCIN TOXICOLOGY) (VESTIBULAR APPARATUS)

ZYMAK, V., inz.; KURKA, E.

Hydraulic drive of extruding presses. Strojirenstvi 13
no. 12: 901-908 D '63.

1. Zavody V. I. Lenina, Plzen.

KOMÍK, V., inz.

Dynamics of a heavy hydraulic unit with pressure accumulator drive.
Strojirenství 14 no.11;812-819 N '64.

1. Zavody V.I.Lenina National Enterprise, Plzen.

TARAN, P., kand.tekhn.nauk; PRISTAVKA, A.; ZYMALEV, G.; SHALIMOV, A.;
SEVAST'YANOV, V.

Speeding-up the rate of increase of labor productivity in the
Dnepropetrovsk Economic region. Sots. trud 5 no.9:98-108 S '60.

(MIRA 1):10

1. Glavnyy inzh. tresta "Leninruda" (for Taran). 2. Zam.nachal'nika
tekhnicheskogo otdela tresta "Leninruda" (for Pristavka). 3. Uprav-
yayushchiy trestom "Dzerzhinskruda" (for Zymalev). 4. Nachal'nik
otdela organizatsii truda tresta "Dzerzhinskruda" (for Shalimov).
5. Zam. direktora po trudu i kadram zavoda im. Dzerzhinskogo
(g.Denprodzerzhinsk) (for Sevast'yanov).
(Krivoy Rog Basin--Iron mines and mining—Labor Productivity)
(Dneprodzerzhinsk--Steel industry)
(Socialist competition)

ZYMALEV, G.S.; IOFFE, Z.M.; PODKAMINNY, G.F.

Economical operation at Dzerzhinskruud Trust mines. Gor.zhur.
no.1:15-17 Ja '65.

1. Trest Dzerzhinskruada, Krivoy Rog.

(MIRA 18:3)

ZYMALEV, G.S.; TIMCHENKO, O.G.

Improving the boring of deep holes in Krivoy Rog Basin mines.
Gor. zhur. no.2:39-42 F '65.

(MIRA 18:4)

1. Upravlyayushchiy trestom Dzerzhinskruda (for Zymalev).
2. Nachal'nik nauchno-issledovatel'skoy laboratorii tresta
Dzerzhinskruda (for Timchenko).

ZYMALEV, G.S.

Improving systems of working at Ingulets Mining Administration
mines. Met. i gornorud. prom. no.6:72-74 N-D '64.

(MIRA 18:3)

MALAKHOV, G.M., doktor tekhn. nauk; CHIRKOV, Yu.I., kand. tekhn. nauk;
KUCHERYAVENKO, I.A., kand. tekhn. nauk; ZYMALEV, G.S.;
KHIVRENKO, A.F.; NESTERENKO, V.V.

Introduction of new variants of the system of sublevel caving
at "Dzerzhinskru" Trust mines. Met. i gornorud. prom. no.2:
50-54 Mr-Ap '65. (MIRA 18:5)

ZYMALEV, G.S.; MAYDAN, D.S.

Labor productivity and cost of ore in the Krivoy Rog Basin.
Met. i gornorud. prom. no.2:59-63 Mr-Ap '65.
(MIRA 18:5)

ZINOV'YEV, V.N.; ZYMALEV, G.S.; ISKRENKO, I.V.

Working thin deposits at the Il'ich mine. Gor. zhur. no.4:23-26
Ap '65. (MIRA 18:5)

1. Trest Dzerzhinskruda, Krivoy Rog.

TITOV, V.D., gornyy inzhener; TARAN, P.N., gornyy inzhener; ZYMALEV, G.S.,
gornyy inzhener; OSTROUKHOV, A.I., gornyy inzhener; AL'TSHELER,
M.A., gornyy inzhener; BORZENKO, P.V., gornyy inzhener.

"Underground mining of ore and placer deposits" by R.P. Kaplunov
and other. Reviewed by V.D. Titov and others. Gor.Zhur,no.11:6)-
64 N '56. (MLRA 10:1)

(Mining engineering--Study and teaching)
(Kaplunov, R.P.)

ZYMALEV, G. S.

Economic advantages of doorless cars. Gor. zhur. no.6:32-33 Je '65.
(MIRA 18:7)

1. Upravlyayushchiy trestom Dzerzhinskruda.

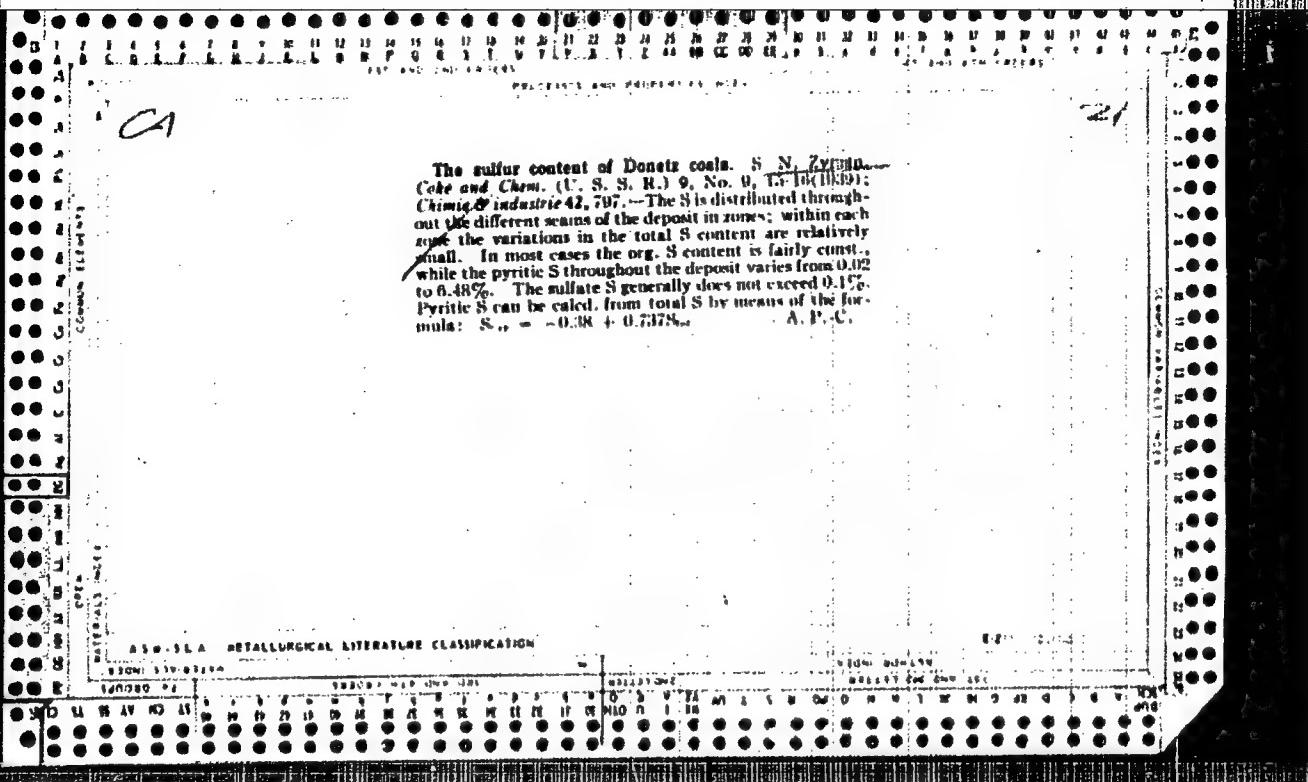
ZYMALEV, G.S., gornyy inzh.; IOFFE, Z.M., inzh.-ekonomist

Capital investments and capital yield in the ore dressing plants
of the "Dzerzhinskruda" Trust. Gor. zhur. no.10:30-33 O '65.
(MIRA 18:11)

1. Trest Dzerzhinskruda, Krivoy Rog.

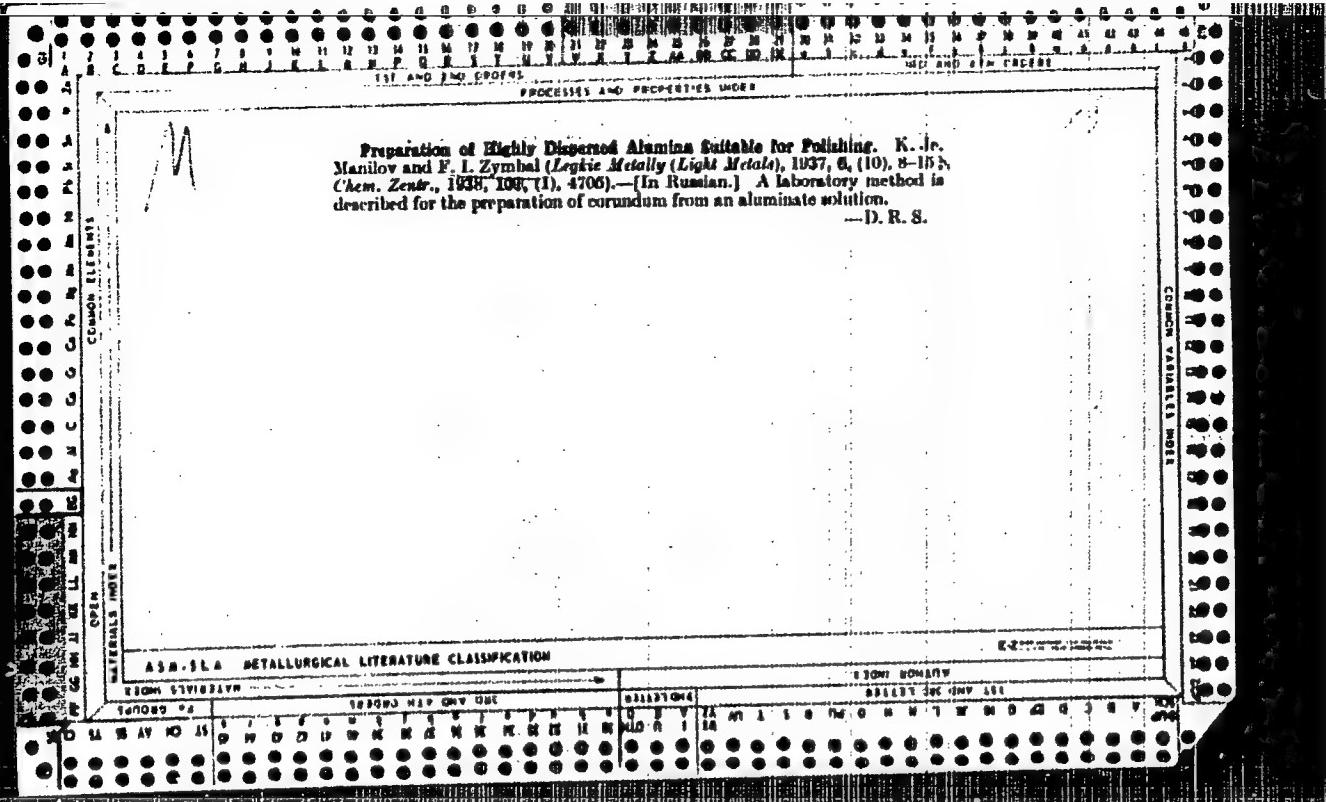
ZYMALEV, G.S.; MAYDAN, D.S.

Possibilities of reducing losses and depletion of ores in the
Krivoy Rog Basin. Met. i gornorud. prom. no.4:54-56 Jl-Ag '65.
(MIRA 18:10)



Preparation of Highly Dispersioned Alumina Suitable for Polishing. K. Je. Manilov and F. I. Zymbl (Logie Metall (Light Metals)), 1937, 8, 8-15; *Chem. Zentr.*, 1938, 108, (1), 4706. — [In Russian.] A laboratory method is described for the preparation of corundum from an aluminate solution. D. R. S.

—D. R. S.



ZIMALEV, G.S., gornyy inzh.; KHIVRENKO, A.F., gornyy inzh.; RED'KO, I.A.,
gornyy inzh.; DYMCHUK, G.K., gornyy inzh.

Ways of reducing expenditures for mine ventilation. Gor. zhur.
no. 12:10-13 D '65.
(MIRA 18:12)

ZYMALEV, G.S.

Analysis of the change in the cost of ore mining. Gor. zhur.
no.11-7-10 N '64. (MIRA 18;2)

1. Upravlyayushchiy trestom Dzerzhinskruda.

ZIMAN, S.M. [Zyman, S.M.]

Some interesting and rare plants from the vicinity of the village
of Yasinya in Transcarpathian Province. Ukr. bot. zhur. 21 no.4:
102-104 '64.

(MIRA 17:11)

1. Srednyaya shkola, Yasinya, Zakarpatskoy oblasti.

ZYMEK-GIERNOWSKA, Teresa

Notes on controlling prolonged uterine hemorrhages with the aid of
Primosiston. Ginek. pol. no.4:565-568 '62.

1. Z II Kliniki Poloznictwa i Chorob Kobiecych AM we Wrocławiu
Kierownik: prof. dr K. Jabłonski.

(UTERINE HEMORRHAGE) (HYDROXYPROGESTERONE)
(ESTRADIOL)

ZYMEK-GIERMANSKA, Teresa

Vaginal foreign bodies in young girls. Pol. tyg. lek. 17 no.31:1222-
1225 30 Jl '62.

1. Z II Kliniki Położnictwa i Chorób Kobiecych AM we Wrocławiu; kierownik:
prof. dr med. Kazimierz Jabłonski.
(VAGINA)

ZYMEK-GIERMANSKA, Teresa

Unusual topography of fallopian tubes in the roentgenographic picture.
Ginek. pol. 33 no.6:851-860 '62.

l. Z II Polonictwa i Chorob Kobiecych AM w Wrocławiu. Kierownik:
prof. dr K. Jabłonski.

(FALLOPIAN TUBES) (STERILITY FEMALE)

DZIOBA, Andrzej; ZYMEK-GIERMANSKA, Teresa

Estimation of the value of histopathological examination of scrapings from the surface of erosion of the vaginal part of the uterus for an early diagnosis of cancer. Gin. polska 28 no.1:39-45 Jan-Feb 57.

1. Z II Kliniki Poloznictwa i Chorob Kobiecyh A.M. we Wroclawiu Kierownik: prof. dr. K. Jablonski. Doc. Dr. Andrzej Dzioba, Wroclaw, Al. Kollataja 32 m. 6.

(UTERUS NEOPLASMS, diag.
histopathol. exam. of scrapings from surface of
erosion from portio vaginalis, value in early diag. (Pol))

(CERVIX, UTERINE, dis.
erosion of portio vaginalis, value of histopathol. exam.
of scrapings from surface in early diag. of uterine cancer
(Pol))

ZYMEK-GIERMANSKA, Teresa; SWARD, Jozef

Attempted gestanone therapy of imminent and habitual abortions.
Wiad. lek. 18 no.18:1447-1450 15 s '65.

l. Z II Kliniki Poloznictwa i Chorob Kobiecyh AM we Wroclawiu
(Kierownik: prof. dr. med. K. Jablonski).

STECKI, Konrad, mgr inz.; ZYMEŁKA, Franciszek, mgr.

Mechanical production of etched stencils. Przegl. geod. 36
no.2:46-48 F'64

ZYMIRSKI, Andrzej

I drove in the Nürburgring. Motor 11 no. 28:14 15 J1 '62.

ZYMIRSKI, A.

Some remarks on difficulties in the traffic of Warsaw.
Motor 11 no.30:3 29 Jl '62.

"APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R002065810012-6

ZYMIŃSKI, A.

Back from abroad; some notes on the traffic in Warsaw.
Motor 11 no.29:3 22 Jl '62.

APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R002065810012-6"

Zymirski, A.: Rusiniak, S.

"Our impressions from the Six-Day Races." p. 788

SVET MOTORU. (Svaz pro spolupraci s armadou) Praha, Czechoslovakia, Vol. 9,
no. 25/26, Dec., 1955.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 9, Sept. 1959
Uncl.

Zymny, E.

Poland/Analytical Chemistry - Analysis of Inorganic Substances, G-2

Abst Journal: Referat Zhur - Khimiya, No 1, 1957, 1246

Author: Zymny, E.

Institution: None

Title: Titrimetric Determination of Silicon Dioxide in Cement

Original

Periodical: Cement. Wapno. Gips, 1956, Vol 12, No 6, 152-153 (published in Polish)

Abstract: See Referat Zhur - Khimiya, 1956, 1154

Card 1/1

Dear Sirs:

I am requesting that you analyze the following sample of material for the presence of 2,4-dinitrophenol.

Sample: 10 mg of white solid.

Method: Dissolve the sample in 10 ml of acetone and add 20 ml of 10% NaOH. Place in a boiling water bath to eliminate the acetone. The NaOH will be eliminated with the acetone. Weigh the sample with dried water dry at 100° and weigh again subtracting the last figure from the original weight of the ppt. No dinitrophenol must be detected in the ppt. (The ppt. is 204.545 mg.) Results remain subject to other methods of detection with respect to purity and purity and when involved. I would appreciate your reply.

M. Her

Zymny, E.

✓ Determination of potassium in water and effluents as potassium borotetrabenzyl. J. L. LEMLY (Prakt. Chem., 1933, 6, 317-329). ... The sample is concentrated and acidified by acetic acid, and K is pptd by adding an NaBz₄H₄I ("kaliquest"). The pptd KBz₄H₄I (I) is determined either gravimetrically after drying in 120° or volumetrically by 0.1% AgNO₃. Li, Na, Ca, Ba, and Sr do not interfere, but Rb, Cs, and NH₄ are pptd. If K and NH₄ are both present, the mixed ppt is weighed, and, after driving off the NH₄ with eq. NaOH, the residual I is again collected and weighed at 120°. Attw. C., 1933, 337.) A. R. PEARSON

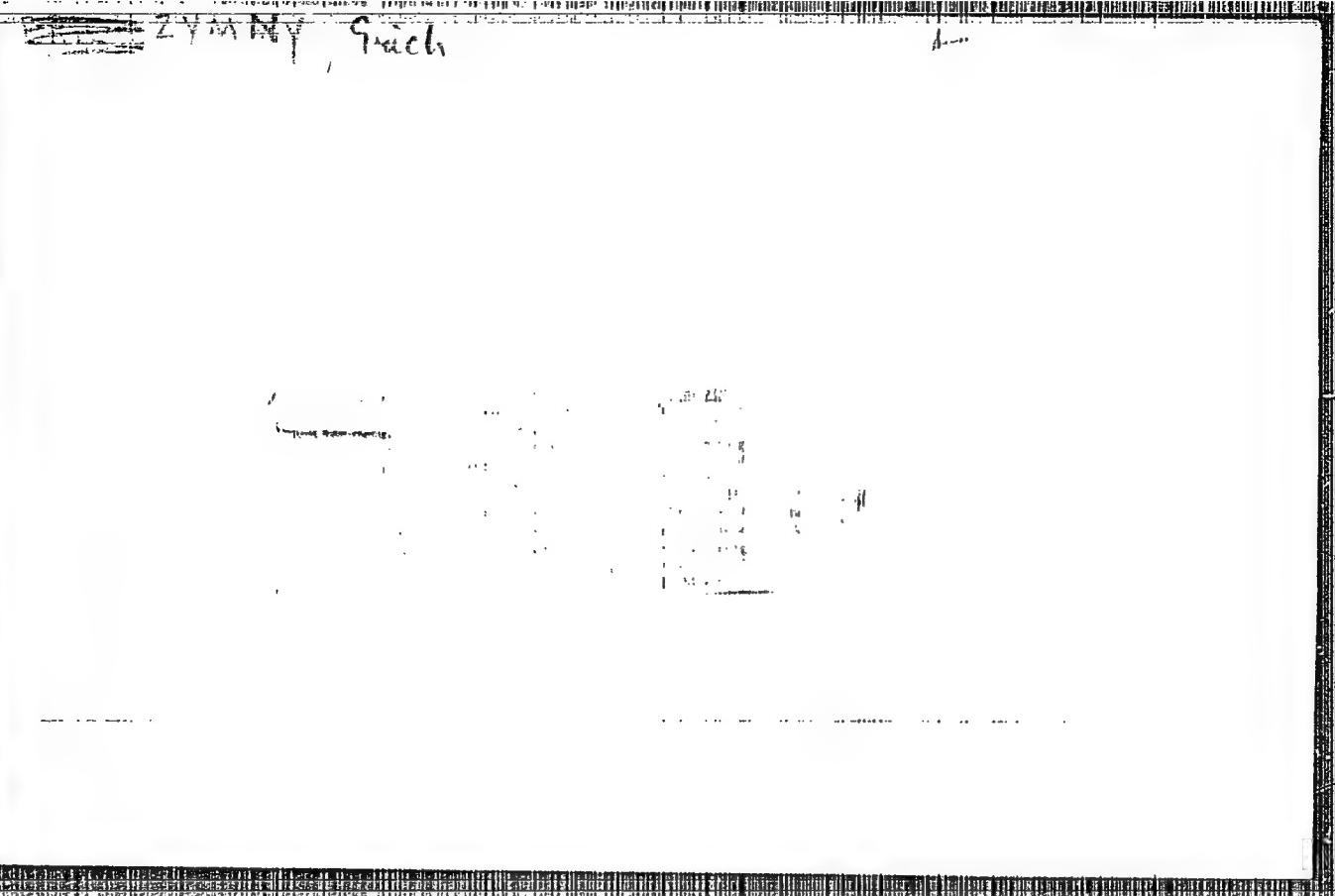
ZYMN, ERICH

11

✓ Chemical pharmaceutical analyses with a simple colorimeter. Erich Zymny. Pharm. Ztschr. 90, 120 (1954).
The construction of a simple visual colorimeter is described.
Edward H. Sheets.

AB
WAT

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002065810012-6



APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002065810012-6"

ACCESSION NR: AP4040935

S/0185/64/009/006/0659/0663

AUTHOR: Alf'orov, Zh. I. (Alferov, Zh. I.); Zy'mogorova, N. S. (Zimogorova, N. S.); Samol'yanov, O. M. (Samol'yanov, A. M.); Trukan, M. K.

TITLE: Photoelectric properties of heterojunctions in some semiconductors

SOURCE: Ukrayins'ky fizy*chny* zhurnal, v. 9, no. 6, 1964,
659-663

TOPIC TAGS: epitaxial film, epitaxial layer, heterojunction, nonrectifying current contact

ABSTRACT: Applying the gas-transport method and using iodine as a transport agent, films of GaAs on GaP, GaP, and Ge on GaAs were prepared to obtain p-n heterojunctions. The transporting material was doped to produce a conductivity of a type opposite to that of the base. Furthermore, a method for obtaining nonrectifying contacts carrying current to the epitaxial layers of Ge, GaAs, and GaP was developed. The current-voltage characteristics of the heterojunctions and their dependence on temperatures were measured. It was

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ACCESSION NR: AP4040935

found that there are two exponential parts in the forward branch of the characteristics. The dependence of the voltage on the temperature in the forward direction is linear. The spectral distribution of photosensitivity has a characteristic shape with two maximums and is determined by both substances of the pair. The forbidden gap of the substance with a larger width of the band can be determined by the maximum in the shortwave region of the spectrum. The red limit of photosensitivity can be determined by the width of the forbidden gap of the substance with a smaller width of the band. Orig. art. has: 6 figures and 4 formulas.

ASSOCIATION: Fizy*ko-tehnichny*y insty*tut im. A. F. Yoffe. AN. SSSR,
Leningrad (Physicotechnical Institute, AN SSSR)

SUBMITTED: 20Jan64

ATD PRESS: 3056

ENCL: 00

SUB CODE: EC, EM

NO REF SOV: 009

OTHER: 001

Card:

2/2

Distr: 4E2c/4E2b(e)

Apparatus for chrome plating of tool and machine parts.
I-II. E. Zymoraki (Inst. Mech. Precyzyjnej, Warsaw,
Metalloberfläche 13, 50-9, 88-00) (1956). A. M. Pommier

ZIMOVETS, Viktor Naumovich; STOROZHUK, O.O.; LUPKO, A.Ya., red.;
GULENKO, O.I.[Hulenko, O.I.], tekhn. red.

[Production concentration on collective farms and its
economic efficiency] Kontsentratsiia vyrobnytstva v kol-
hispakh i ee ekonomichna efektyvnist'. Kyiv, Derzhsil'-
hospvydav URSR, 1962. 82 p. (MIRA 16:12)
(Ukraine—Collective farms—Management)

ACC NR: AP7004974

SOURCE CODE: UR/0048/66/030/009/1463/1466

AUTHOR: Vlasenko, N.A.; Zyn'o, S.A.

ORG: none

TITLE: Polarization effects in electroluminescent ZnS:Mn films /Report, Fourteenth All-Union Conference on Luminescence (Crystal Phosphors) held at Riga, 16-23 Sept. 1965/

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v.30, no.9, 1966, 1463-1466

TOPIC TAGS: electroluminescence, zinc sulfide, manganese, electric polarization, LUMINOPHOR

ABSTRACT: The authors have investigated polarization effects in 0.25 micron thick films of a ZnS:Mn electroluminophor between SnO_2 and Al electrodes. The metallic electrode was separated from the luminophor by a 100-150 Å thick layer of SiO . It was found that when a steady voltage is applied to such a cell it becomes polarized and the luminescence intensity rapidly drops by a factor of about 100. The polarized condition persisted for several hours when the cell was short circuited, but the cell could be restored to the unpolarized condition by irradiation with photons having energies between 1.6 and 3 eV. When to a polarized cell there was applied a voltage of the same sign as the polarizing voltage there resulted only weak luminescence, but when a voltage of the opposite sign was applied, the initial luminescence flash was brighter than that from an unpolarized cell. The luminescence intensity (both of the initial flash and in the steady state) was higher when the aluminum electrode was the

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ACC NR: AP7004974

anode when it was the cathode, and the duration of the polarizing and depolarizing processes also depended somewhat on the polarity. The presence of moisture reduced the polarization and accelerated the depolarizing process. It is hypothesized that the polarization is due to accumulation of free carriers at the luminophor-electrode boundary as a result of entrapment of electrons in deep traps. The ratio of the polarization field to the polarizing field was evaluated as the ratio $(V_2 - V_1)/V_2$, where V_1 is the initial polarizing voltage and V_2 is the voltage of the same sign that must be applied to the polarized cell to produce an initial flash of the same intensity as the flash produced by application of V_1 to the unpolarized cell. This ratio was found to be about 0.35 and to vary little with the magnitude and sign of the polarizing voltage. The polarization effects provide a simple explanation for a number of experimental facts, including: 1) the low brightness achieved by application of successive pulses of the same sign; 2) the strong influence of a test pulse of opposite sign on the brightness produced by the following ten to twenty exciting pulses; 3) the differences in the slopes of the voltage-brightness characteristics for different types of excitation; and 4) the transition phenomena that occur when successive pulses of alternating sign are applied to the unexcited phosphor. Orig. art. has: 1 formula, 2 figures and 1 table.

SUB CODE: 20

SUBM DATE: none

ORIG. REF: 002

OTH REF: 001

Card 2/2

ACC NRI AP7004975

SOURCE CODE: UR/0048/56/030/009/1467/1469

AUTHOR: Vlasenko, N.A.; Zyn'o, S.A.

ORG: none

TITLE: Investigation of the characteristics of low-voltage electroluminescent ZnS:Mn films under pulse excitation /Report, Fourteenth All-Union Conference on Luminescence (Crystal Phosphors) held at Riga, 16-23 Sept. 1965/

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 30, no. 9, 1966, 1467-1469

TOPIC TAGS: electroluminescence, zinc sulfide, manganese, time constant, pulse rate, optic brightness

ABSTRACT: The authors have investigated the pulsed characteristics of thin electroluminescent ZnS:Mn films produced by the two-stage technique of N.A.Vlasenko and Yu.A.Popkov (Optika i spektroskopiya, 8, 81 (1960)) in order to assess the technical possibilities of these low-voltage electroluminophors. It was found that on application of a 0.1 to 1.0 millisecond square pulse the brightness would rise exponentially with a time constant of about 0.3 millisecond for the duration of the pulse and would then decay exponentially with a time constant of 1.2 millisecond. Experiments with an equivalent circuit showed that these time constants are much longer than the RC constants of the cell. It is hypothesized that the long time constants are associated with the long lifetime of the excited state of the Mn²⁺ ions, with carrier entrapment processes, and with polarization effects. It was not possible to achieve a brightness exceeding 5 to 10 nit with excitation by pulses of the same sign, but brightnesses several orders of magnitude higher could be obtained by excitation with pulses of

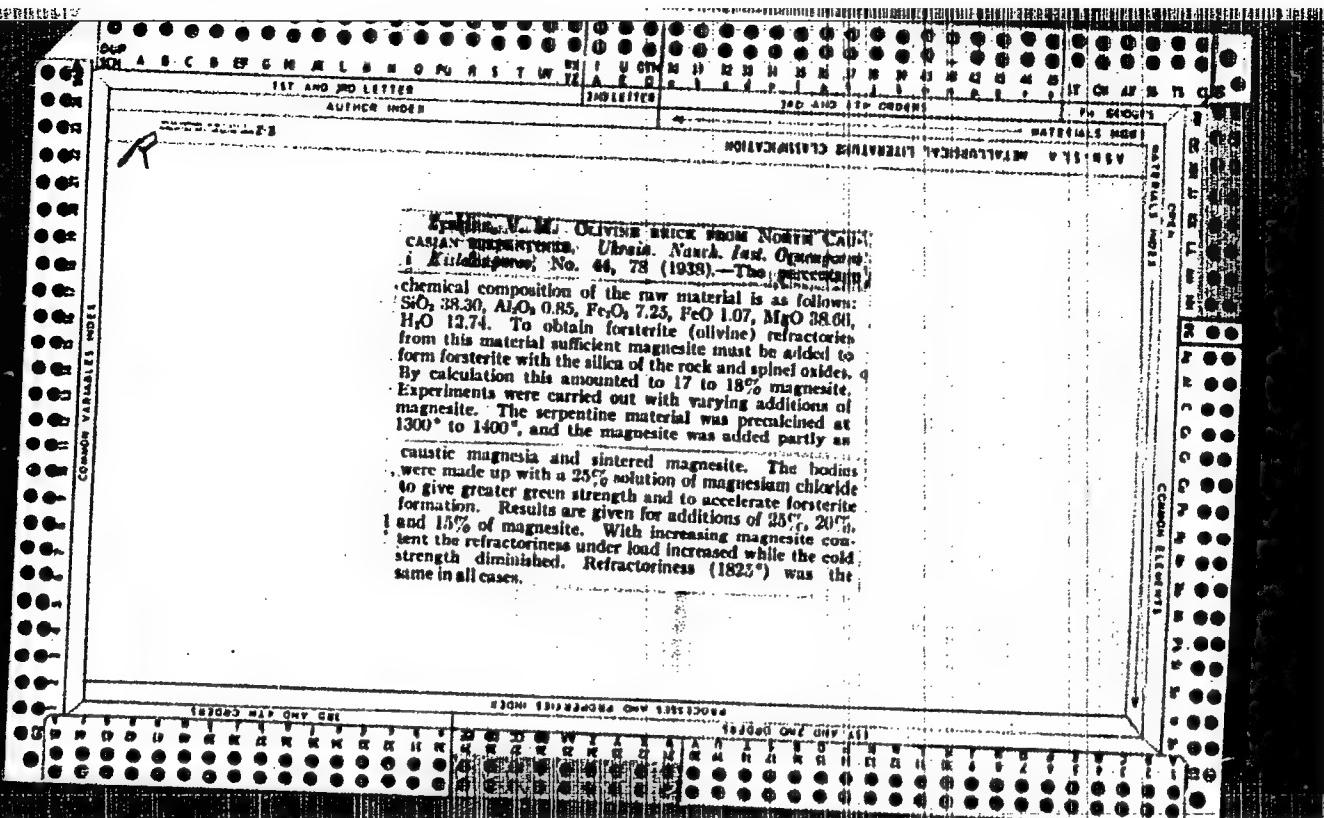
Card 1/2

ACC NR: AP7004975

alternating sign. The brightness increased linearly with the pulse repetition rate for rates between 20 and 1000 Hz and was proportional to the 8-th to 10-th power of the pulse height for brightnesses below 20 nit. The dependence of the brightness on the pulse duration for fixed height and repetition rate was more complex. It was found that brightnesses of 10 to 20 nit could be achieved with 10 to 50 microsec pulses of heights below 30 V and repetition rates from 100 to 300 Hz. It is concluded that the investigated electroluminophors are suitable for use in sign indicators, matrix indicator screens, and other devices that do not require a duty factor higher than 0.001. Orig. art. has: 3 figures.

SUB CODE: 20 SUBM DATE: none ORIG. REF: 002 OTH REF: 001

Card 2/2



1ST AND 2ND SITES		PROCESSES AND PROPERTIES INDEX																																																													
COMPOUNDING AND PREPARATION OF BODIES, ETC.																																																															
<p>OLIVINE BRICKS FROM NORTH CAUCASIAN SERPENTINES .. V. M. Zyklova (<i>Ind. Ussr. Ind. Ogran. Kishlach</i>; No. 44, 7K, 1959) The percentage chemical composition of the raw material is as follows: SiO₂ 38.30, Al₂O₃ 0.85, Fe₂O₃ 7.25, FeO 1.07, MgO 39.40, H₂O 13.74. To obtain forsterite (olivine) refractories from this material sufficient magnesite must be added to form forsterite with the silica of the rock and spinel oxides. By calculation this amounted to 17-18% magnesite. Experiments were carried out with varying additions of magnesite. The serpentine material was precalcined at 1,300°-1,400°, and the magnesite was added partly as caustic magnesia and sintered magnesite. The bodies were made up with a 25% solution of magnesium chloride to give greater green strength and to accelerate forsterite formation. Results are given for additions of 25%, 30%, and 35% of magnesite. With increasing magnesite content the refractoriness under load increased while the cold strength diminished. Refractoriness (1,823°) was the same in all cases.</p>																																																															
MATERIALS INDEX		E&E-316 INDEX																																																													
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="12" style="text-align: center;">ATA-164 METALLURGICAL LITERATURE CLASSIFICATION</th> </tr> <tr> <th colspan="12" style="text-align: center;">1950-51 MET. LIT. INDEX</th> </tr> <tr> <th colspan="12" style="text-align: center;">SECTION ONE</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">3</td> <td style="text-align: center;">4</td> <td style="text-align: center;">5</td> <td style="text-align: center;">6</td> <td style="text-align: center;">7</td> <td style="text-align: center;">8</td> <td style="text-align: center;">9</td> <td style="text-align: center;">10</td> <td style="text-align: center;">11</td> <td style="text-align: center;">12</td> </tr> <tr> <td style="text-align: center;">U</td> <td style="text-align: center;">A</td> <td style="text-align: center;">V</td> <td style="text-align: center;">H</td> <td style="text-align: center;">B</td> <td style="text-align: center;">W</td> <td style="text-align: center;">I</td> <td style="text-align: center;">M</td> <td style="text-align: center;">L</td> <td style="text-align: center;">N</td> <td style="text-align: center;">O</td> <td style="text-align: center;">P</td> </tr> </tbody> </table>				ATA-164 METALLURGICAL LITERATURE CLASSIFICATION												1950-51 MET. LIT. INDEX												SECTION ONE												1	2	3	4	5	6	7	8	9	10	11	12	U	A	V	H	B	W	I	M	L	N	O	P
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Zynkina, V. M., OLIVINE IRON FROM NOVAYA CAY

CASIAN REPUBLIC. U.S.S.R. 1938. Open-779

T. KILCHUPER, NO. 44, 78 (1938).—The percentage

chemical composition of the raw material follows:

SiO₂ 88.30, Al₂O₃ 0.35, Fe₂O₃ 7.25, FeO 1.07, MgO 38.00,
H₂O 12.74. To obtain forsterite (olivine) refractories
from this material sufficient magnesite must be added to

form forsterite with the silica of the rock and spinel oxides.
By calculation this amounted to 17 to 18% magnesite.

Experiments were carried out with varying additions of
magnesite. The serpentinite material was precalcined at

1300° to 1400°, and the magnesite was added partly as

raw magnesite and sintered magnesite. The bodies
were made up with a 25% solution of magnesium chloride
to give greater green strength and to accelerate forsterite
formation. Results are given for additions of 20%, 23%,
and 15% of magnesite. With increasing magnesite content
the refractories under load increased while the cold
strength diminished. Refractoriness (1823°) was the
same in all cases.

Zynkina, V. M., OLIVINE BRICK FROM NORTH CAUCASIAN SERPENTINES. "UDINTS'NIJZHOVYI OGNEVYI PREDMET." No. 44, 78 (1938).

The percentage chemical composition of the raw material was as follows: SiO_2 39.30, Al_2O_3 0.86, Fe_2O_3 7.25, FeO 1.07, MgO 38.00, H_2O 12.71. To obtain forsterite (olivine) refractories from this material sufficient magnesite must be added to form forsterite with the silica of the rock and spinel oxides. By calculation this amounted to 17 to 19% magnesite. Experiments were carried out with varying additions of magnesite. The serpentine material was precalcined at 1300° to 1400° , and the magnesite was added partly as

anhydrite magnesite and sintered magnesite. The binders were made up with a 20% solution of magnesium chloride to give greater green strength and to accelerate forsterite formation. Results are given for additions of 20%, 20%, and 16% of magnesite. With increasing magnesite content the refractoriness under load increased while the cold strength diminished. Refractoriness (1800°) was the same in all cases.

ACQ. NR.	COLLECTOR/TRANSLATOR	REF ID
AVC007901		SOURCE CODE: UR/0368/00/005/001/0067/0072 66 63
AUTHOR:	Vlasenko, N. A.; Zyn'o, S. A.	
ORG:	none	
TITLE:	Investigation of characteristics of low-voltage electro-luminescent ZnS-Mn films under pulsed excitation	
SOURCE:	Zhurnal prikladnoy spektroskopii, v. 5, no. 1, 1966, 67-72	
TOPIC TAGS:	zinc sulfide optic material, electroluminescence, light excitation, optic brightness	
ABSTRACT:	Inasmuch as in most practical applications electro-luminescent films are used under pulsed excitation conditions, the authors determine the brightness waves, the time constant of luminescence buildup and attenuation, and the dependence of the average brightness of low-voltage ZnS-Mn films on the duration of the voltage pulse, the frequency, amplitude, and polarity in the case of rectangular pulses. The ZnS.Mn film was produced by a method described earlier (Opt. i spektr. v. 8, 81, 1960) and placed between a transparent electrode (SnO_2 or In_2O_3) and an aluminum electrode, the latter being separated from the ZnS.Mn by an insulating SiO layer. The tests were made on unit cells ranging in area from 0.5 to 10^{-3} cm^2 . A flash of brightness was observed when a unipolar pulse was first applied to the sample, or when the polarity of	
Card 1/2	UDC: 535.376	

L-09406-67

ACC NR: AP6027901

the pulses was reversed. The average brightness of the electroluminescence was found to increase appreciably on going from unipolar exciting pulses to alternating pulses. The use of alternating pulses made it possible to obtain an average brightness not lower than 15 -- 20 nit at a pulse amplitude ≥ 30 V, pulse duration ≥ 20 usec, and a repetition frequency > 200 cps. An equivalent circuit of the electro-luminescent cell is used to explain the kinetics of the electro-luminescence and the values of the equivalent-circuit parameters are evaluated. The electro-luminescence buildup time was approximately 4×10^{-4} sec, and the decay time was 1.2×10^{-3} sec. The values were much larger than the time constant of the equivalent circuit, from which it is deduced that the growth time of the electro-luminescence in the films is connected with the duration of the excited state of the Mn^{2+} ion, and not with the capture of the carriers. It is concluded that the phosphor ZnS.Mn can be successfully used in many electro-luminescent devices which do not require very large off-duty cycles (in different character-display matrix screens etc.). The authors thank V. I. Kislyuk and I. Yu. Shabliy for help with the experiment and Doctor of Physical-Mathematical Sciences M. P. Lisitsa for interest in the work and a discussion of the results. Orig. art. has:

4 figures and 4 formulas

SUB CODE: 20/ SUBM DATE: 18Feb65/ ORIG REF: 002/ OTH REF: 001

Card 2/2

CELLER, Witold; ZYCIENSKI, Jozef

Semicommercial studies on the obtaining of synthetic xylenes.
Przem chem 41 no.10:578-582 0 '62.

1. Zaklad Syntezy Kontaktowej i Zaklad Technologiczny, Instytut
Chemii Ogolnej, Warszawa.

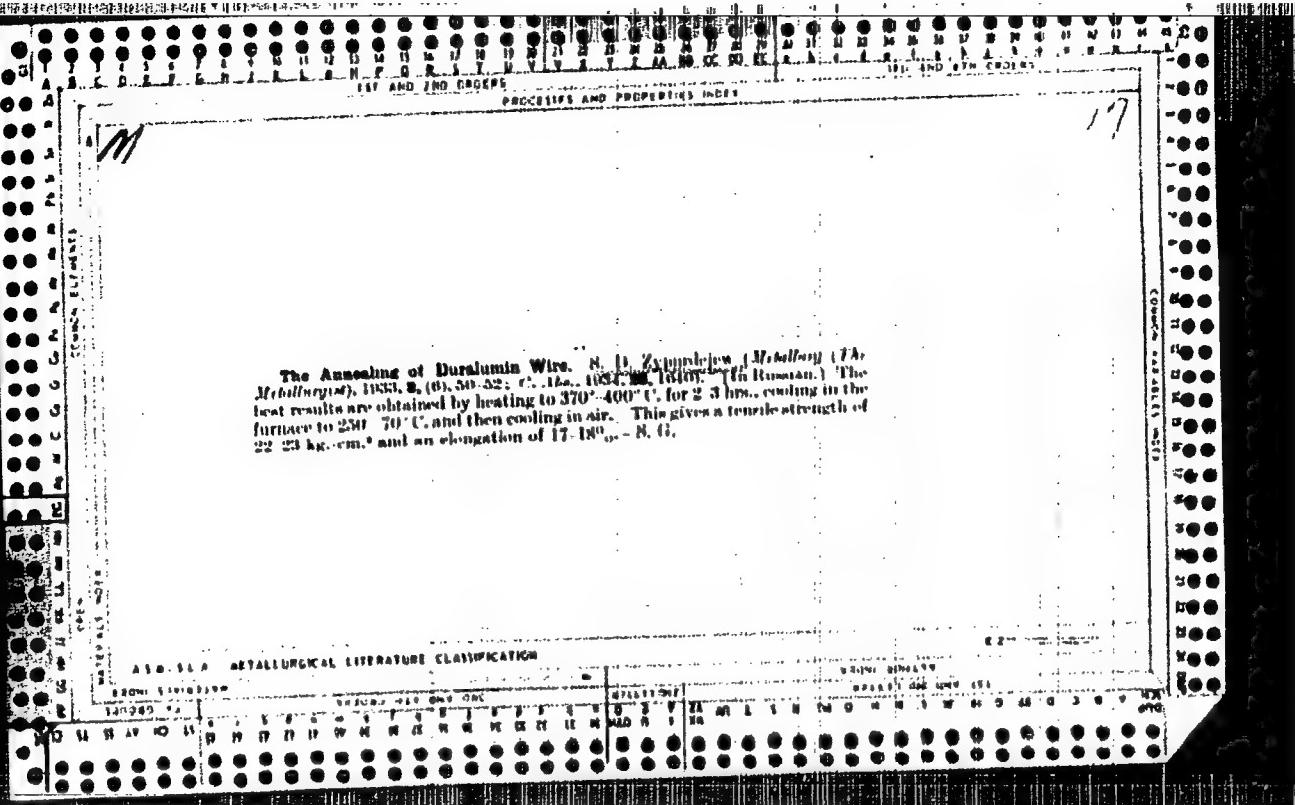
RATYNSKI, W.; TURKIEWICZ, J.; ZYPRANSKI, P.

Potential scattering of neutrons for Fe, Co, Ni, Cu, Zn, Se. Bul Ac
Pol mat 8 no.2:117-118 '60. (EEAI 9:12)

1. Institute of Experimental Physics, Warsaw University and
Institute for Nuclear Research, Polish Academy of Sciences.

Presented by A.Soltan.

(Neutrons) (Iron) (Cobalt) (Selenium)
(Nickel) (Copper) (Zinc)



The Annealing of Duralumin Wire. N. I. Zupenko. (*Metallurg* (The Metallurgist), 1953, 8, (6), 50-52; *Zh. Tekh. Issled.*, 1954, No. 16(6).) The test results are obtained by heating to 370°-400° C, for 2-3 hrs., cooling in the furnace to 230°-70° C, and then cooling in air. This gives a tensile strength of 22-23 kg./cm.² and an elongation of 17-18% - N. I.

The influence of Antimony and Bismuth on the Workability of Copper Bolts.
S. D. Zypurkejew (*Metallurgie (The Metallurgist)*, 1931, (6), 873-882; *Chem. Zentr.*, 1934, **106**, 1, 2343-2344).—[In Russian.] Copper containing less than 0.1% antimony and 0.005% bismuth can be rolled hot to 7 mm., but with 0.01% of each of these metals fracture occurs. For hot-rolling to 53 mm. the upper limits of these impurities are 0.24% antimony (with less than 0.015% bismuth) and 0.01% bismuth (with less than 0.01% antimony). Similar limits hold for cold-rolling. Normal properties of 2 mm. wire are obtained only when both impurities are less than 0.005%.—A. R. P.

A35.3.4 METALLURGICAL LITERATURE CLASSIFICATION

卷之三

APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R002065810012-6"

ZYRIANOVA, T. I.

"Benzantronyl-sulphamic acid." Ioffe, I. S., Zyrianova, T. I. and Seslavin, V. R. (p. 965)

SO: Journal of General Chemistry (Zhurnal Obshchey Khimii) 1944, Volume 14, no. 9-10.

POPOV, Aleksandr Ivanovich, prof.; ZYRIN, A.A., red.; ZHUKOVA, Ye.G.,
tekhn.red.

[Introduction to mathematical logic] Vvedenie v matematicheskuiu
logiku. Leningrad, Izd-vo Leningr.univ., 1959. 104 p.

(Logic, Symbolic and mathematical) (MIRA 12:9)

EVLIYA, Chelebi [Evliya, Efendi]; ZHELYAKOV, A.D.; TVERTINOVA, A.S. [translator]; VEKILOV, A.P. [translator]; GARBUZOVA, V.S. [translator]; GRIGOR'YEV, A.P. [translator]; ZYRIN, A.A. [translator]; IVANOVA, R.D. [translator]; IVANOV, S.N. [translator] Prinimali uchastiye: KYAMILEV, Kh. [translator]; MASHTAKOVA, Ye.I. [translator]; GRUNINA, E.A., red., izd-va; KUZ'MIN, I.F., tekhn. red.

[A travel book (excerpts from the work of a 17th century Turkish traveler); translation and commentary] Kniga puteshestviia (izvlecheniya iz sochineniya turetskogo puteshestvennika XVII veka); perrevod i kommentarii. Moskva, Izd-vo vostochnoi lit-ry. (Pamiatniki literatury narodov Vostoka: Perevody, no.6) No.1. [Moldavia and the Ukraine] Zemli Moldavii i Ukrayny. 1961. 337 p.

(MIRA 14:12)

1. Vostochnyy fakul'tet Leningradskogo Gosudarstvennogo universiteta (for all except Kyamilev, Mashtakova, Grunina, Kuz'min).
2. Institut narodov Azii AN SSSR (for Kyamilev, Mashtakova).

(Elviya, Efendi, ca. 1611- ca. 1682)
(Moldavia—Description and travel)
(Ukraine—Description and travel)

L 18055-66 EWT(1)/EWT(m)/ETC(f)/ENG(m)/T/EMP(t)/EWA(h) IJP(c).

ACC NR: AT6006176 JD/JG/GS/AT

SOURCE CODE: LR/0000/65/000/000/0295/0300

AUTHOR: Tresvyatskiy, S. G.; Zyrin, A. V.; Makaimenko, S. A.

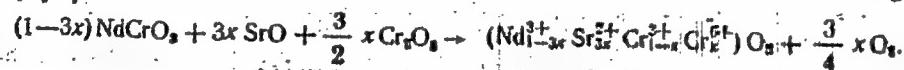
ORG: none

21 44 55
TITLE: Certain electrophysical properties of semiconductors based on oxides of
metals with changeable valence 27 B+1

SOURCE: Khimicheskaya svyaz' v poluprovodnikakh i tverdykh telakh (Chemical bond in
semiconductors and solids). Minsk, Nauka i tekhnika, 1965, 295-300

TOPIC TAGS: semiconductor, rare earth element, thermoelectric property, lanthanum
compound, neodymium compound, chromium compound, thermal emf

ABSTRACT: The temperature dependence of the coefficient of thermoelectric force
(α , in microvolts/degree) was measured for a series of strontium and calcium doped
lanthanum and neodymium chromites. The doping of these Perovskite-type chromites
raises the valence of a portion of the chromium atoms to six according to the scheme:



Card 1/2

L 18055-66
ACC NR: AT6006176

where $x \leq 0.05$. This is reflected in a hole-type semiconductivity in the doped chromites. The electrical conductivity of the chromite samples was measured potentiometrically by a 500 kc volt-ammeter using alternating current. For each sample, the temperature (400-1000°K) and the potential difference (which is proportional to the logarithm of sample's electrical conductivity) were recorded simultaneously. The coefficient of thermal emf (α) was calculated using the temperature difference between two ends of the sample. The temperature dependence of the thermal emf coefficient, temperature dependence of specific electric resistivity, and the dependence of α on the temperature logarithm are graphed for several doped chromites.
Orig. art. has: 3 figures, 3 formulas.

SUB CODE: 20 SUBM DATE: 31May65/ ORIG REF: 001/ OTH REF: 003

Card 2/2 SAV

L 21302-66 EWP(e)/EMT(m)/EWA(d)/EWP(t) IJP(c) JD
ACC NR: AP6007292 SOURCE CODE: UR/0225/66/000/002/0092/0096

AUTHOR: Danilenko, V. A.; Zyrin, A. V.

ORG: Institute of Problems of Metal Science AN UkrSSR (Institut problem materialovedeniya AN UkrSSR)

TITLE: Study of the properties of sintered ferromagnetic materials by the eddy current method

SOURCE: Poroshkovaya metallurgiya, no. 2, 1966, 92-96

TOPIC TAGS: ferromagnetic material, sintering, eddy current, magnetic permeability, resonance voltage, specific conductivity, copper compound

ABSTRACT: The authors studied the possibility of applying the eddy current method to the investigation of the surface layers of conducting ferromagnetic materials. A theoretical dependence of the resonance voltage on the specific conductivity and magnetic permeability of the material is obtained. The regularity obtained was verified on sintered samples of two compositions: Cu-Mo and Fe-Cu-Mo. The experimental data agree qualitatively with the theoretical calculations. Orig. art. has: 4 figures and 10 formulas. [Author's abstract.]

SUB CODE: 11/ SUBM DATE: 06Oct65/ ORIG REF: 006/

Card 1/1

ZYRIN, A.V.; TUL'CHINSKIY, L.N.

Peculiarities of the magnetic measurement of ferrate parameters
with a rectangular hysteresis loop. Trudy inst. Kom.stand.mer i
izm. prib no.64:270-277 '62. (MIRA 16:5)
(Magnetic measurements)

ZYRIN, G.

"Start Television Receiver," by G. Zyrin, Radio, No 11,
Nov 56, pp 21-24

This article describes the construction and performance characteristics of the Start TV receiving set recently designed at one of the Moscow radio engineering plants.

This set is built with 18 miniature tubes and a rectangular 220X290-mm Type 35LK2B picture tube. It is designed for broadcast reception on 5 TV channels and 64- to 73-Mc frequency-modulation radio programs. Its sensitivity is about 200 micro-volts, and the scanning line is 450-500. The set is designed for 110-, 127-, and 220-ac power supply and consumes about 140 w. The intermediate audio frequency is 27.75 Mc and the video is 34.25 Mc. The plate potential of the frame scan generator tube is 500-600 v.

Sum 1219

ZYRIN, G., inzh.; YEFIMENKOV, R., inzh.; KHRUSTALEV, G., inzh.
"IUnost!" television receiver. Radio no.1:21-25 Ja '66.
(MIRA 19:1)

S/112/59/000/012/092/097
A052/A001

Translation from: Referativnyy zhurnal, Elektrotehnika, 1959, No. 12, p. 27⁴,
258⁴⁴

AUTHORS: Sevast'yanov, N.S., Zyrin, G.P.

TITLE: On Possibilities of Application of Ultrasonic Oscillations in
Foundries

PERIODICAL: Tr. Omskogo mashinostroit. in-ta, 1958, No. 2, pp. 139-145

TEXT: An ultrasonic treatment of zinc melt was carried out on a 400-kilo-
cycle frequency. Quartz was used as an emitter. The experiments have shown that
the hardness of irradiated samples is 1.5 times that of untreated ones. In an
ultrasonic treated sample there are no acicular crystals. The authors maintain
that by using magnetostrictive emitters (and, consequently, lower frequencies)
still better results will be achieved.

M.G.S.

Translator's note: This is the full translation of the original Russian abstract.

Card 1/1

ZYRIN, N.G.; ORLOV, D.S.

Methods of determining the activity of sodium ions in soils and
soil solutions. Vest. Mosk. un. Ser. biol., pochv., geol., geog.
13 no. 1:71-80 '58. (MIRA 11:7)

1. Moskovskiy gosudarstvennyy universitet, Kafedra pochvovedeniya.
(Soils--Analysis)
(Sodium)

COUNTRY : USSR
CATEGORY : Soil Science/ Soil Genesis and Geography.
ADS. JOUR. : RZhBiol., No. 5, 1959, No. 20013
AUTHOR : Dobrovolskiy, G.V.; Zyrin, N.G.
INST. : Moscow University
TITLE : Geographical Features and Conditions in
Bottom Land Soils.
ORIG. PUB. : Vestn. Mosk. Un-ta ser. biol., pochvoved.,
geol., geogr., 1957, No. 3, 129-135
ABSTRACT : The zonal characteristics of river bottom
soil are produced by the close genetic connec-
tion between the composition of the river's
alluvium, river and ground waters edging into
the valley and the features of the soil cover
on the river basin. Using the Vyatka, Koma,
Belaya, Oka, Moskva and Khyaz'ma River bottom
lands as an example, the problem of provincial
differences within the bottomland soils of a
single soil-climatic zone is discussed.

CARD: 1/2

ZYRIN, N.G.

The problem of the behavior of potassium in soils. Uchenye Zapiski Moskov.
Gosudarstven. Univ. im. M.V. Lomonosova No.105, Pt. 2, 55-78 '46.
(CA 47 no.21:11624 '53)

ZYRIN, Nikolay Georgiyevich; ORLOV, Dmitriy Sergeyevich; VONOB'YEVA,
Lyudmila Andreyevna; KOROBTSOVA, N.A., red.

[Reference and calculation tables for the physicochemical
study of soils] Spravochnye i raschetnye tablitsy dlia
fiziko-khimicheskikh metodov issledovaniia pochv. Moskva,
Izd-vo Mosk. univ., 1965. 131 p. (MIRA 18:8)

ZYRIN, S. I Dr.

Metody i Organizatsiya Tekhnicheskogo Kontrolia na Predpriyatiakh Sherstianoi Promyshlennosti (Methods and Organization of Technical Control in the Wool Industry)

180 p. 1.00

SO: Four Continent Book List, April 1954

38099. ZYRIN, S. G.

Mery predotvratshcheniya loska, obrazuyushchegosya v protsesse noski
kostyurnykh kamvol'nykh tkaney. V. Sb: Nauch.-issled. trudy (Nauch.-
issled. in-t sherstyanoy prom-sti). M-L, 1949, s. 109-35

ZYVIN, S. G.

Zyvin, S. G., "Preventative measures for the elimination of floss resulting from the wear of worsted cloth suits," In the symposium: Nauch.-issled. trudy (Nauch.-issled. in-t sherst. prom-sti), Moscow-Leningrad, 1949, p. 109-35

SO: U-4034, 29 Oct 53. (Letoris 'Zhurnal 'nykh Statey, No. 16, 1949).

ACC NR: AT6022255

SOURCE CODE: UR/0000/66/000/000/0048/0055

AUTHOR: Zyrin, S. S.; Karnaikh, O. I.; Petrov, D. M.

ORG: none

TITLE: Changing the frequency of a klystron oscillator with multiresonator oscillatory system

SOURCE: Vsesoyuznaya nauchnaya sessiya, posvyashchennaya Dnyu radio. 22d, 1966. Sektsiya elektroniki. Doklady. Moscow, 1966, 48-55

TOPIC TAGS: klystron, multiresonator klystron, SHF oscillator

ABSTRACT: Two connected problems of frequency stability in a klystron oscillator are solved; on the basis of stability conditions, the oscillatory systems are analyzed, and design formulas for the multifrequency klystron oscillator are deduced. For the frequency-stability analysis, truncated equations describing a

Card 1/2

ACC NR: AT6022255

system with many degrees of freedom are used; supercritical couplings among n resonators (n "circuits" in an equivalent network) are assumed. The stability condition is described by: $G_{2s} > 2G_{2w}\frac{K_s}{K_w}$, where G_{2s} , G_{2w} , K_s , K_w are the

conductances and feedback factors at spurious and working frequencies, respectively. Best practical results can be obtained from 3- and 5-resonator klystrons whose central natural frequency is used as a working frequency. Engineering formulas for a 3-resonator klystron are developed (tunable band, feedback factor, stabilization coefficient, optimal stationary conditions, output power). Orig. art. has: 4 figures and 13 formulas.

SUB CODE: 09 / SUBM DATE: 09Apr66 / ORIG REF: 003

Card 2/2

22180

24,3500

S/048/61/025/004/029/048
B117/B212

AUTHORS: Andreyev, I. S., Arzumanyan, G. B., and Zyrina, L. V.

TITLE: Various possibilities to stimulate electroluminescence properties of crystals

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, v. 25, no. 4, 1961, 520-522

TEXT: The present paper was read at the 9th Conference on Luminescence (crystal phosphors). The following test results are given: I. Investigating the effect of production conditions on the characteristic of ZnS-Cu electroluminophors resulted in: 1) The spectra of ZnS-Cu luminophors produced in media without HCl are somewhat shifted towards the short wave region compared to spectra of luminophors which have been produced in media with HCl; 2) the frequency dependence of the luminescence differs at a sinusoidal voltage for luminophors produced in different media; 3) not only the spectrum but also the frequency dependence will change if the annealing temperature is raised; 4) they will experience a similar change if the annealing time is changed. The optimum time is 2 hr; X

Card 1/4

22180

Various possibilities to...

S/048/61/025/004/029/048
B117/B212

5) solvents will have an important but variable effect on luminosity, spectrum and frequency dependence of the luminophors. II. The investigation of the electroluminescence of single crystals has yielded the following results in the field of four electrodes which were normal to each other and at a sinusoidal voltage: 1) Absence of anisotropy of the electroluminescence properties in the crystals investigated; 2) a great influence of the electrode contact on the luminosity and its waves, especially for the case where the luminescent bands are distributed unevenly over the crystal; 3) this effect is connected with the passage of current through the crystal; 4) the form of the luminosity wave may be explained on the assumption that the illumination does not occur simultaneously at each point of the crystal. III. The investigation of luminosity maxima during a Π shaped pulsating voltage applied to a capacitor (without dielectric) showed that: 1) If the potential of the transparent electrode is constantly above the second one, then the maxima of the "swelling" and "decreasing" will develop with the same rate as the voltage changes, i.e., within $\sim 10 \mu\text{sec}$; 2) the drop rate of the luminosity is by one magnitude higher than that of the increase and it is somewhat higher for the swelling maximum than for that of the decreasing maximum;

Card 2/4

22140

S/048/61/025/004/029/048
B117/B212

Various possibilities to...

2) if the potential of the transparent electrode is constantly below that of the 2nd electrode the maxima of the swelling and decreasing will consist of two parts: in part one, as earlier, the luminosity will increase with the rate the voltage increases or decreases; in part two, this will be $1/2 \pm 1/3$ slower. The possibility to use electrolysis for the activation of ZnS luminophors has been investigated. ZnS powder has been put into a quartz container having electrodes of a wanted material then it has been annealed in nitrogen at very high temperatures ($700 \pm 1000^{\circ}\text{C}$) for a certain time while a current (0.4 ± 15 ma) has been sent through. The relative role of the electrolysis and the diffusion during the transfer of activating substance and during the activating process has been investigated with the help of tracer atoms. The tests have shown the prevailing role of the electrolysis. Besides, they led to the assumption that the electrolysis might not only determine the acceleration of the transfer of activating elements but also the type of the swelling or it might cause other changes in the phosphorus which are favorable for the electroluminescence. In order to check this assumption tests have been made with ZnS-AgNO_3 with the same silver concentration. This compound has been

Card 3/4

22180

Various possibilities to...

S/048/61/025/004/029/048
B117/B212

annealed under the same conditions as used for the production of phosphorus but without applying any current. Both luminophors showed a bright blue photoluminescence. The luminophor obtained by annealing did not show electroluminescence. The electroluminescence of the luminophors obtained by electrolysis is characterized by the following data:

Potential in volts 300 400 500 600 700 900

Luminosity in relative units 2 5.5 9.5 13 24 48

The data obtained show that it is possible to use this method for the production of electroluminophors. There are 2 Soviet-bloc references.

ASSOCIATION: Kafedra obshchey fiziki Sredneaziatskogo gos. universiteta im. V. I. Lenina (Department of General Physics of (Soviet) Central Asia State University imeni V. I. Lenin)

Card 4/4

ZYRINA, L.V.; YAGUDAYEV, M.D.

Temperature dependence of the cathodic atomization of tungsten.
Trudy SAGU no.65:33-37 '55. (MLRA 9:5)
(Tungsten) (Ion beams)

ALIMOV, Sh.A.; ANDREYEV, I.S.; ZIRINA, L.V.

Characteristics of the preparation of ZnS - Cu electroluminophores.
Izv. AN Uz. SSR. Ser. fiz.-mat. nauk no.4:52-56 '61. (MIRA 14:9)

1. Tashkentskiy gosuniversitet imeni V.I.Lenina.
(Luminescent substances) (Zinc sulfide)

ANDREYEV, I.S.; ZYPINA, L.V.; ARZUMAN'YAN, G.B.

Electrolysis as a method for the activation of electroluminophors.
Izv. AN Uz. SSR. Ser. fiz.-mat. nauk no.4:83-87 '61. (MIRA 14:9)

1. Tashkentskiy gosuniversitet imeni V.I.Lenina.
(Luminescent substances) (Electrolysis)

SUVOROV, A.S.; ZYNE YON; SHIDOVICH, Ye.V.

Laboratory apparatus with a powder-catalyst fluidized bed. Neftper.
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1. Moskovskiy ordena Trudovogo Krasnogo Znameni institut neftekhimi-
cheskoy i gazovoy promyshlennosti im. akad. Grubkina.

SOKOL, Stanislaw; ZIROMSKA, Monika; MORZYCKA, Maria.

Brain abscess in a 15-month-old child. Polski tygod.lek. 11 no.2:
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1. Z II Kliniki Chirurgicznej: kier: prof. dr K.Debicki, z Kliniki
Neurologicznej; kier: prof. dr E.Majewska i z Instytut Medycyny
Morskiej i Tropikalnej A.M. w Gdansku; kier: prof. dr J.Morsycki.
Gdansk-Wrzeszcz, ul. Debinki 7, II Klinika Chirurgiczna A.M.

(BRAIN, abscess
in child)

(ABSCESS
brain, in child)

NIELUBSZYC, Stanislaw; CYMOWSKI, Lucjan; BYROMSKA, Monika

Arteritis nodosa. Polskie arch. med. wewn. 26 no.6:949-956
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J. Penson, Z Zakladu Anatomii Patolog. A.M. w Gdansku, Kier. Prof.
dr. nauk med. W. Czarnocki, Z Kliniki Neurolog. A.M. w Gdansku,
Kier. Prof. dr. med. Z. Majewska, Gdansk, ul. Sluza 9/10. III
Klinika Chorob Wewn. A.M.G.

(PERIARTERITIS NODOSA, case reports,
(Pol))

ZYROWA, E.

Work experience of the institute on principles of Marxism-Leninism
at the medical academy in Warsaw. Zdrowie pub., Warsz. no.1:36-39
Jan-Feb 55.

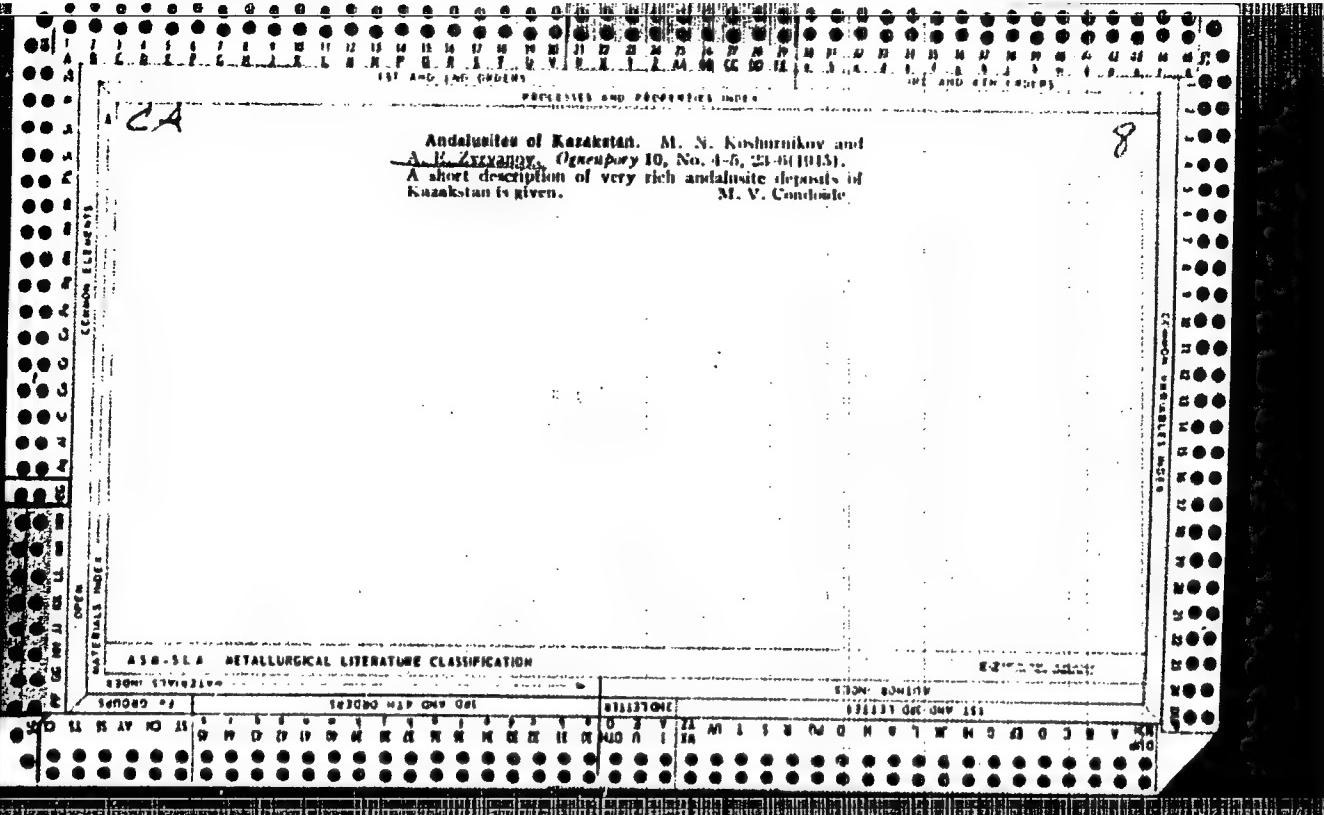
1. Kierownik Zakladu Podstaw Marksizmu-Leninizmu, A. M. w Warszawie.
(EDUCATION, MEDICAL,
in Poland, teaching of Marxism-Leninism)

R

Koshurnikov, M. N. and Zyrinov, A. E. KAZAKH
STAT ANDALUSITE. Ogarevsk, 10-11 or 23-26 (1943).
Of all the Soviet Union, Kazakhstan is particularly rich in deposits of andalusite. Many of these deposits are far removed from railroads, and their exploitation is not considered at present. Fourteen deposits, either presently exploited or suitable for immediate exploitation, are described. The Semiz-Bugn deposit located 140 km east of Karagand is estimated to contain 100,000 tons of ore. The andalusite content is 30 to 81%, and there is 12 to 31% pyrophyllite. The rich ores contain 52% Al₂O₃, less than 2% Fe₂O₃, and less than 6% K₂O + Na₂O. The medium grade ores of this deposit contain 40% Al₂O₃; the low grade ores contain 15 to 20% andalusite. The Kourrad deposit is estimated at several million tons. The northern part of this deposit comprises an area of 150,000 sq. m., and its southern part is approximately 200,000 sq. m. The ore of the northern deposit contains over 30% andalusite. The Vugnye Borly deposit is located 27 km. northwest of Kourrad. It consists of quartzites containing 10 to 40% andalusite and stretches over an area of 200,000 sq. m. In one of the better surveyed parts of this area the corundum content is 60 to 70%. The Bes-Beku deposits are located 150 km. southeast of Karkaralinsk and comprise 25.5 sq. km. In some of its parts were found pockets containing 20 to 40% andalusite. The Ak-Saran deposit is located 150 km. south of Karkaralinsk in the foothills of the Kyayl Raf Mountains. The secondary quartzites containing 10 to 70% andalusite stretch over an area of 3 sq. km. In addition, four outcrops

and numerous small veins of almost pure andalusite were found. The Kara-Chelku deposit, 35 km. south of the Bes-Beku deposit, consists of loose, quartz-micaceous minerals containing 40 to 50% andalusite and approximately 15% kaolinite. The Kurpetal deposit, 150 km. southwest of Karkaralinsk, comprises 10 sq. km. of secondary quartzites. Within it are three areas containing andalusite. The northeastern area, 280 X 400 m., contains 30 to 80% andalusite. South of it is an area 1000 X 250 m., containing 30 to 60% andalusite and 10 to 30% pyrophyllite. The third area, to the northwest, contains 40 to 80% andalusite. Several kilometers north of Kurpetal is the Chok-Parla deposit, comprising 120,000 sq. m. and consisting of secondary quartzites containing 30 to 60% andalusite, with a maximum of 85%. Forty kilometers southeast of the Monty Karagand Railroad, north of Kourrad is the Sheben' Kara deposit. It consists of three areas, containing 15 to 30%, 40 to 60%, and 60 to 70% andalusite. This area is only partly surveyed and probably contains more than is presently estimated. The Altai deposit is located 17 km. from Ust'-Kamenogorsk. The minerals found there are quartz, disthene, andalusite, vermicite, and, as accompanying minerals, rutile, leucomica, pyrophyllite, and ferruginous compounds. The combined content of andalusite and disthene is 20 to 35%. The reserve of these minerals is estimated at several million tons. The

difficulty presented in concentrating this ore is the presence of Ti and Fe. A concentrate containing 38% Al_2O_3 is a definite possibility. This deposit is a valuable raw-material source for the production of silumin and Al metal. The Kos-Kyzyl deposit, 37 km southeast of Kounrad, consists of two parts, one contains 10 to 40% and the other over 50% andalusite. The deposit "Mavir UP" is located 23 km. southeast of Bektau-Ata. Over a secondary quartzite area of 211,000 sq. m., 40 to 80% andalusite was found. In the deposit of Kazy-Tas 25 km. south of Ak-Togal, were found four areas of secondary quartzites containing 10 to 35% andalusite enriched by 5 to 15% corundum and diaspore. In addition 30 to 50% alumite was also found. In the northern branches of the Bektau-Ata Mountains is the Telemes deposit covering an area of 250,000 sq. m. and containing 30 to 50% andalusite. The value of andalusite in the production of refractories is proved. It is used in the production of spark plugs, protective coatings in glassmelting pots, stoppers and linings for steel pouring ladles, refractories for cupolas, etc.



A.C.S.

Karkhata andalusite. M. N. Kostomarov and E. Zvezdin. "Ogneprery," 1945, No. 4/2, pp. 23-26. — Of all the Soviet Union, Kazakhstan is particularly rich in deposits of andalusite. Many of these deposits are far removed from tributaries, and their exploitation is not considered at present. Fourteen deposits, either presently exploited or suitable for immediate exploitation, are described. The Semis-Baga deposit located 160 km. east of Karagandy is estimated to contain 11,000 tons of ore. The andalusite content is 30 to 35%, and there is 12 to 31% pyrophyllite. The rich ores contain 50% Al_2O_3 , less than 2% Fe_2O_3 , and less than 6% $\text{K}_2\text{O} + \text{Na}_2\text{O}$. The medium-grade ores of this deposit contain 40% Al_2O_3 , the low-grade ores contain 15 to 25% andalusite. The Kouraud deposit is estimated at several million tons. The northern part of this deposit comprises an area of 150,000 sq. m., and its southern part is approximately 200,000 sq. m. The core of the northern deposit contains over 30% andalusite. The Vazhalyr lumpy deposit is located 27 km. northwest of Konrad. It consists of quartzes containing 10 to 60% andalusite and stretches over an area of 250,000 sq. m. In case of the better surveyed parts of this area the andalusite content is 60 to 78%. The Bes-Teku deposits are located 150 km. southeast of Karatal and comprise 23.5 sq. km. In some of its parts were found pockets containing 35 to 60% andalusite. The Al-Sarsen deposit is located 150 km. south of Karatalinsk in the foothills of the Karyl-Kal Mountains. The secondary quartzes containing 10 to 70% andalusite stretch over an area of 2 sq. km. In addition, four outcrops and numerous small veins of almost pure andalusite were found. The Kars-Chetin deposit, 25 km. south of the Bes-Teku deposit, consists of loose quarry-mine materials containing 60 to 70% andalusite and approximately 15% kaolinite. The Karypatal deposit, 120 km. southwest of Karatalinsk, comprises 10 sq. km. of secondary quartzites. Within it are three areas containing andalusite. The northeastern one is 400 m. across, contains 30 to 50% andalusite. Some of it is as small as 200 m. containing 30 to 40% andalusite and 10 to 30% pyrophyllite. The third area, to the northwest, contains 40 to 80% andalusite. Several kilometers north of Biysk in the Chelysh-Patra deposit, comprising 150,000 sq. m., there are outcrops of secondary quartzites containing 30 to 60% andalusite, with a maximum of 85%. Forty kilometers southeast of the Matyts' Karsaud Railroad, north of Konrad, is the Shashchen-Kara deposit. It consists of three areas containing 15 to 35%, 40 to 60%, and 60 to 70% andalusite. This area is only partly surveyed, and probably contains more than is presently estimated. The Altai deposit is located 17 km. from Ust-Kamenogorsk. The minerals found there are spinel, diabase, andalusite, serpentine, and, as accompanying minerals, rutil, leucophane, pyrophyllite, and ferruginous compounds. The estimated (S.A.E.)

content of andalusite and diaspore is 20 to 55%. The reserve of these minerals is estimated at several million tons. The difficulty presented in concentrating this ore is the presence of Ti and Fe. A concentrate containing 80% Al_2O_3 is a definite possibility. This deposit is a valuable raw-material source for the production of aluminum and Al metal. The Koz-Kyryl deposit, 97 km. southeast of Kourrad, consists of two parts; one contains 10 to 40% and the other over 50% andalusite. The deposit "Mamyr UP" is located 22 km. southeast of Bektau-Ata. Over a secondary quartzite area of 234,000 sq. m., 40 to 80% andalusite was found. In the deposit of Kazy' Tas, 23 km. south of Ak-Togai, were found four areas of secondary quartzites containing 10 to 85% andalusite enriched by 5 to 15% corundum and diaspore. In addition 20 to 50% aluminite was also found. In the northern branches of the Terektau-Ata Mountains is the Telemes deposit covering an area of 270,000 sq. m. and containing 30 to 80% andalusite. The value of andalusite in the production of refractories is proved. It is used in the production of spark plugs, protective crucibles in glassmelting pots, stoppers and linings for steel-pouring ladles, refractories for cupolas, etc.

M.IIO.

GRINDEL', N.M.; ZYRIN, N.G.

Method for determining the organophosphorus compounds and their dynamics in the plowing horizon of slightly cultivated turf-Podzolic soils. Pochvovedenie no. 12:17-27 D '65.

MIRA 19:1)

1. Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova.
Submitted July 31, 1964.

ZYRIN, N.G.; GRINDEL', N.M.

Seasonal dynamics of the oxidation-reduction potential and iron soluble in acids (Fe^{2+} and Fe^{3+}) in turf-Podzolic soils. Nauch. dokl. vys. shkoly; biol. nauki no. 2:175-181 '63. (MIRA 16:4)

1. Rekomendovana kafedroy pochvovedeniya Moskovskogo gosudarstvennogo universiteta im. M.V. Lomonosova. (OXIDATION-REDUCTION REACTION) (SOILS--IRON CONTENT) (PODZOL)